

12/09/13 Agenda

- Wake Up
- Agenda for rest of Semester
- Review Quiz from Tuesday
- Review Homework from Thursday, Worksheet 5.3 day 1
- Section 5.3 day 2
 - Rearranging Equations into Slope-Intercept Form
- Homework - Worksheet 5.3 day 2

Agenda for Rest of Semester 1

December

			05 5.3 day 1	06 MAP Testing
09 5.3 day 2	10 5.3 day 3	11 5.3 day 4	12 Quiz 5.1-5.3	13 Review day 1
16 Review day 2	17 Review day 3	18 Finals	19 Finals	20 Finals

Warm Up: Homework Out (WS 5.3 day 1)



Identify the slope and y-intercept of the linear equation:

$$y = -4x + 6$$

$$y = \underline{m}x + \underline{b}$$

$$m = -4 \quad b = 6$$

Write the equation of this line:

$$m = 8, \quad b = -11$$

$$y = 8x - 11$$

5.3 day 2 - Rearrange Equations into Slope-Intercept Form

Target 5B

December 9, 2013

Goal: Given an equation, rewrite it in Slope-Intercept Form.

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Remember: Literal Equations?

We rearranged equations to isolate (solve for) a specific variable.

That's what we're going to do but we're always going to solve for y.

Remember: The way we do it is to isolate (get alone) the designated variable (y) and move all the other terms to the other side of the equation.

Formula: $y = mx + b$ Where m = slope and b = y-intercept

WRITE X
TERM
FIRST

Ex. Rearrange the following equations into slope-intercept form.

NO
DECIMALS!
NO MIXED
FRACTIONS!

$$1.) \frac{2y}{2} = \frac{3x}{2} - \frac{1}{2}$$

$$y = \frac{3}{2}x - \frac{1}{2}$$

$$2.) \frac{3x}{-3x} + \frac{4y}{-3x} = \frac{-24}{-3x}$$

$$\frac{4y}{4} = \frac{-3x - 24}{4}$$

$$y = \frac{-3}{4}x - 6$$

$$y = mx + b$$

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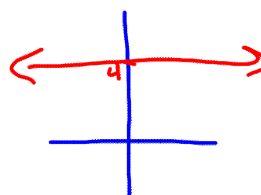
$$3.) \frac{2}{-4x} = \frac{-5y}{-4x}$$

$$\frac{-4x + 2}{-5} = \frac{-5y}{-5}$$

$$\frac{4}{5}x - \frac{2}{5} = y$$

$$4.) \frac{2y}{2} = \frac{8}{2}$$

$$y = +4$$



5.3 day 2 - Rearrange Equations into Slope-Intercept Form

Target 5B

December 9, 2013

Formula: $y = mx + b$ Where m = slope and b = y-intercept

Modeling
with Slope-
Intercept
Form:

Ex. Write an equation in slope-intercept form that represents the following situation.

- 5.) An airplane with no fuel weighs $\overbrace{2575}^b$ lbs. Each gallon of gasoline added to the fuel tanks weighs $\underbrace{6}_m$ lbs.

$$y = 6x + 2575$$

- 6.) A video store charges \$10 for a rental card plus \$2 per rental.

$$y = 2x + 10$$

x IS # OF
RENTALS